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Vol.1 Fort Collins, Colo., May 8, 1944 No.2

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AN ANALYSIS OF THE CATTLE SITUATION IN THE WAR YEAR 1944
WITH EMPHASIS ON THE URGENT NEED FOR ORDERLY AND TIMELY
MARKETING FOR ECONOMIC REASONS AS WELL AS A CONTRIBUTION
TO THE FOOD REQUIREMENTS OF ALL THE ALLIED COUNTRIES.

SLOGAN: "MARKET MORE IN '44"

Official publication of the Colorado State Committee of
the Agricultural Adjustment Agency, Fort Collins, Colo.

Foreword

Excerpt from an address delivered on February 16, 1944,
by Judge Marvin Jones, War Food Administrator

"The genius of America has made many wonderful things, but no one has ever invented a substitute for a good beef steak. Important and healthful as beef is to our diet, it is just as important and just as healthful to our national economy. We couldn't live without it. Beef sticks to our economic ribs. . . .During the last three years we produced more beef and veal than in any other three years in our history. . . .Our pre-war record supply was the 74 million head in 1934, which, together with the drouth, contributed to the overstocking of the range that occurred at that time. Our ranges had never before had to carry so many cattle as in 1934, and when the dry years came—as dry years do—there followed disaster. The government had to come to the rescue and buy cattle to keep them from dying on the range. We must remember those dry years and realize that they may come again. Today, instead of 74 million cattle there are upward of 80 million. Maybe if we are lucky enough to have the same excellent weather conditions that we have enjoyed for the last five years our ranges and available feed supplies can carry this record number. But, of course, we can't count on that. That is a problem we must keep in mind."

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AMERICA IS CALLING, CALLING---

"All that goes up comes down," still clicks as a factual statement, despite the heavier-than-air exploits which have converted the continents into tank-town stops on the spinning surface of the shrinking earth. The old saw rings true in economics as well as in physics. And it applies to cattle numbers.

It's an open secret, known even to the wayfaring man, that cattle numbers must come down,---way down. They are at the highest point in all history. It is equally apparent that they cannot be reduced satisfactorily during the usual heavy marketing periods. The Nation's slaughtering facilities and battle-gearred transport system cannot be expanded enough to take care of such unprecedented gluts.

Therefore---and it's as simple as ABC---the tempo should be stepped up. Earlier, heavier marketings of lighter cattle will save the day. Our country and our Allies need the beef---for the skillet, not on the hoof. The one plea of the hour is for increased sales, not increased numbers. The market is ready, but the sellers are few. Although the flow has been accelerated appreciably since the first of the year, there is still room for vast improvement. If continued on an increasing scale, there is hope. A let-down now, even though the grass has been revived by an abundance of late moisture, would only postpone the day of reckoning.

One more staggering thought: How tragic if the cattle men should complacently drift through this war period, continually adding to their holdings, unmoved by the persistent plea for timely and orderly marketing, releasing stuff for slaughter only during the glut periods---and then bump into another 1934!

On the following pages, the cattle situation is analyzed by men who have made a lifetime study of the cattle industry,---yes, much of it from the hurricane deck of a cow pony.

THE CATTLE SITUATION

The 82.2 million head of cattle on farms January 1, 1944, was the largest beginning-of-the-year inventory of record, and 10 percent larger than the most recent peak reached in 1934. The number of cattle increased 3.1 million head during 1943 notwithstanding the developing shortage of feed and the mounting emergency requirements for meat in the war food program.

The large number of cattle on farms and ranches in 1943 used more feed, especially forage, than there is any reasonable assurance will be available in the years immediately ahead. During the last five years, especially 1941 and 1942, grazing conditions on both pastures and ranges were unusually favorable and the acreages of pasture and hay were larger than will be maintained under the wartime food production program.

Although slaughter has been somewhat larger the first three months of this year than in the same period last year, a high rate of slaughter must be maintained which will materially reduce the number of cattle in most sections of the country. Otherwise producers are confronted with the risk that the supplies of feed that can reasonably be expected will be insufficient for maintaining cattle in good growing condition.

Increased slaughter also is needed to meet the requirements for beef in the war food program. Compared with the slaughter of about 27.3 million cattle and calves in 1943, it will be necessary to slaughter at least 32.6 million head in 1944 to meet the estimated minimum total requirements for beef and veal for civilian, lend-lease and military use.

Summer Slaughter Necessary --

An increase in slaughter is needed particularly in the summer months when the slaughter of livestock is seasonally low. With 16 percent fewer cattle in feedlots on January 1 than a year earlier, and 23 percent fewer on April 1 than a year ago, it is very likely that grass fat cattle will be in unusual demand by the time they reach reasonably good slaughter condition.

The current effective demand for beef and veal is considerably larger than the estimated minimum requirements. In view of the greatly increased purchasing power of civilians and the increased demand for all meats, conditions are now unusually favorable for cattlemen to adjust numbers to feed carrying capacity by marketing unusually large numbers for slaughter. The inevitable adjustments will be more difficult to make if demand for meat should decrease and the feed situation become more acute.

Obtaining maximum beef output for the war food program and a better adjustment between cattle numbers and feed and range resources is primarily a problem of encouraging an increase in the slaughter of cows and heifers that otherwise would be retained for breeding, and of maintaining a sufficient margin between the prices of feeder cattle and finished cattle to encourage putting a large number of feeder cattle into feedlots, especially for market in the early summer months.

Recent reports of the Department of Agriculture indicate that on April 1, 1944 stocks of feed grains on farms were approximately 500 million bushel less than one year ago. They also show that there were 171 million grain-consuming animal units on farms on that date compared with 160 million a year earlier. Of further concern to stockmen is the increasing industrial demand for grain, particularly for industrial alcohol, the basic raw material for synthetic rubber and an essential component of smokeless gun powder.

Marketing Goals Are Heavy --

Last fall, State Production Goals Committees estimated that the feed carrying capacity for cattle and calves was only sufficient for about 76.8 million head and recommended that numbers be reduced to that level by January 1, 1945. This would mean a reduction of 5.4 million during 1944 and would require a slaughter of about 36.5 million cattle and calves, or 9.2 million more than was slaughtered in 1943. It is unlikely that packing facilities could handle so large a number, even if marketings were distributed so as to reduce seasonal peaks. It is unlikely also that anything short of a drought could influence producers to send so many cattle and calves to market in 1944. Slaughtering facilities probably could handle about 35 million cattle and calves, if a considerable part of the increase of 7.7 million head over 1943 could be brought to market in the summer months. A slaughter of about 35 million head in 1944 would reduce numbers to about the January 1, 1943 level. (See Table 2).

It should be observed here that Colorado is by no means the chief offender in this gamble with top-heavy herds. Although numbers are out of line here and a major shock to the cattle industry, whether from weather conditions or numerous other causes, would be attended by losses in this state, it is true that the main danger zones are in the more congested valley areas farther east.

In the final analysis, total numbers tell the story. Even though the critters are scattered over many states, once the liquidation procession starts, there's trouble all along the line.

When a sparrow lights in the top of a sturdy oak, the resulting tremor is felt at the tip of the top root. When lightning strikes, the process is only magnified. It's all the same tree.

Earlier Marketings More Profitable --

The table on the following page presents some marketing angles that should be of unusual interest to herd owners. It reflects the monthly average prices of slaughter cattle grading Good at Chicago.

In the first price column are the monthly averages for the years 1928 to 1942 inclusive.

In the second column are the 1943 average prices from June through November.

The third column represents the average weights of a group of cows weighed at four-week intervals at the Northern Plains Range Experiment Station, showing the gain or loss as the grazing season progressed, with the date of the weighing indicated.

The fourth column gives the gain or loss in the preceding four weeks.

The fifth column represents the relative percentage of shrink, based on one year's study at the Central Plains Experiment Station, where yearling heifers were weighed full at night and after over-night confinement without feed or water, weighed over again in the morning.

The final column is an estimate of the gross value per head, assuming that in all months these cows would grade Good at Chicago. Probably the cows lacked finish in June and would not have made that grade and therefore would not have commanded the average price paid in that month. However, the gains made after the July 12 weighing were so small that there would be no improvement in grade from that point on. The lighter shrink in October and November indicates that yearling heifers harden as grass matures. Probably cows would follow the same trend.

It will be noted that prices of the grade have consistently reached a peak in July, and decline from that point until the end of the year, with a gradual increase reaching a peak again in May, June, or July. It would appear

that even under more normal circumstances dry cows that have been wintered reasonably well can be marketed to advantage through July and August. If the above data on monthly gains are representative of normal range operations it would appear that in 1944, with a real likelihood of glutted markets and transport during the late fall, the marketing of grass fat cattle as early as possible will be to the financial advantage of the producer. This acquires added significance in view of the fact that a constant supply of beef is a military necessity and a patriotic obligation upon the cattle industry. The table:

Monthly Average Price of Slaughter Cows Grading Good at Chicago							
Ave. Price at Chicago	1928-42	1943	Date Wed.	Weight	Pounds Gain in 4 Weeks	Over- Night Shrink	Gross Value Per Head
June	\$7.20	\$13.45	June 12	1,080	110	8.8%	\$131.14
July	7.00	13.60	July 12	1,160	60	8.8%	143.99
August	6.95	12.80	Aug. 7	1,165	5	7.3%	138.24
September	6.85	12.45	Sept. 4	1,180	15	7.6%	135.95
October	6.75	12.00	Oct. 2	1,180	0	5.7%	133.56
November	6.60	11.75	Nov. 1	1,150	30	5.9%	126.13
December	6.55	11.50					

Distribution By Classes of Cattle --

To fill the urgent need for more dairy products during the war will require further increases in the number of milk cows. But the maximum number (About 28.2 million head) for which there will be feed and other facilities should be reached by the end of 1944 as the larger-than-usual number of heifers retained in 1942 and 1943 will then come into milk production.

With less need for retaining so large a proportion of the dairy heifers and heifer calves for increasing the number of milk cows in 1945 more of them can be marketed for slaughter or used for increasing the rate of replacement in cows and thereby making the less productive cows available for slaughter.

Thus under either alternative approximately one-sixth of the total reduction in number of cattle and calves can be obtained in dairy animals kept for milk without reducing milk production. Slaughter of this type of stock, including veal calves, should be increased during early summer to avoid competition from range areas where the operation depends entirely upon summer and fall grazing for actual production.

During the last five years many beef cows have been retained in herds beyond their period of maximum usefulness. More cows than usual, therefore, -- perhaps 1.7 million more -- should be culled from beef cattle herds. If the number of cows in the herd is reduced, fewer heifers would be needed for replacements and fewer bulls would be needed.

The suggested change in numbers in 1945 compared with earlier years is shown in the table on the following page.

Table 2. Suggested number of cattle and calves on farms
January 1, 1945, by classes, with comparisons

Class and age group	: 1934	: 1939	: 1941	: 1942	: 1943	: 1944	: 1945
	: :	: :	: :	: :	: :	: :	: goal
	: Million	: Million	: Million	: Million	: Million	: Million	: Million
	: head	: head	: head	: head	: head	: head	: head
<u>Kept for milk</u>	:	:	:	:	:	:	:
Cows, 2 years +	: 26.9	24.6	25.5	26.4	27.1	27.6	28.2
Heifers, 1-2 years:	: 5.4	5.1	5.7	5.8	6.0	6.2	5.7
Heifer calves	: 5.7	5.9	6.2	6.6	6.9	7.0	6.2
Total	: 38.0	35.6	37.4	38.8	40.0	40.8	40.1
<u>Other cattle (beef)</u>	:	:	:	:	:	:	:
Cows, 2 years +	: 12.7	10.0	11.2	12.1	12.9	13.7	12.0
Heifers, 1-2 years:	: 3.7	3.1	3.8	4.0	4.4	4.8	4.4
Steers, 1 year +	: 6.1	5.2	5.9	6.4	6.9	7.5	6.7
Bulls, 1 year +	: 1.7	1.6	1.7	1.7	1.8	1.9	1.8
Other calves	: 12.2	10.6	11.5	12.2	13.1	13.5	13.2
Total	: 36.4	30.5	34.1	36.4	39.1	41.4	38.1
Grand Total	: 74.4	66.0	71.5	75.2	79.1	82.2	78.2

Numbers by Regions --

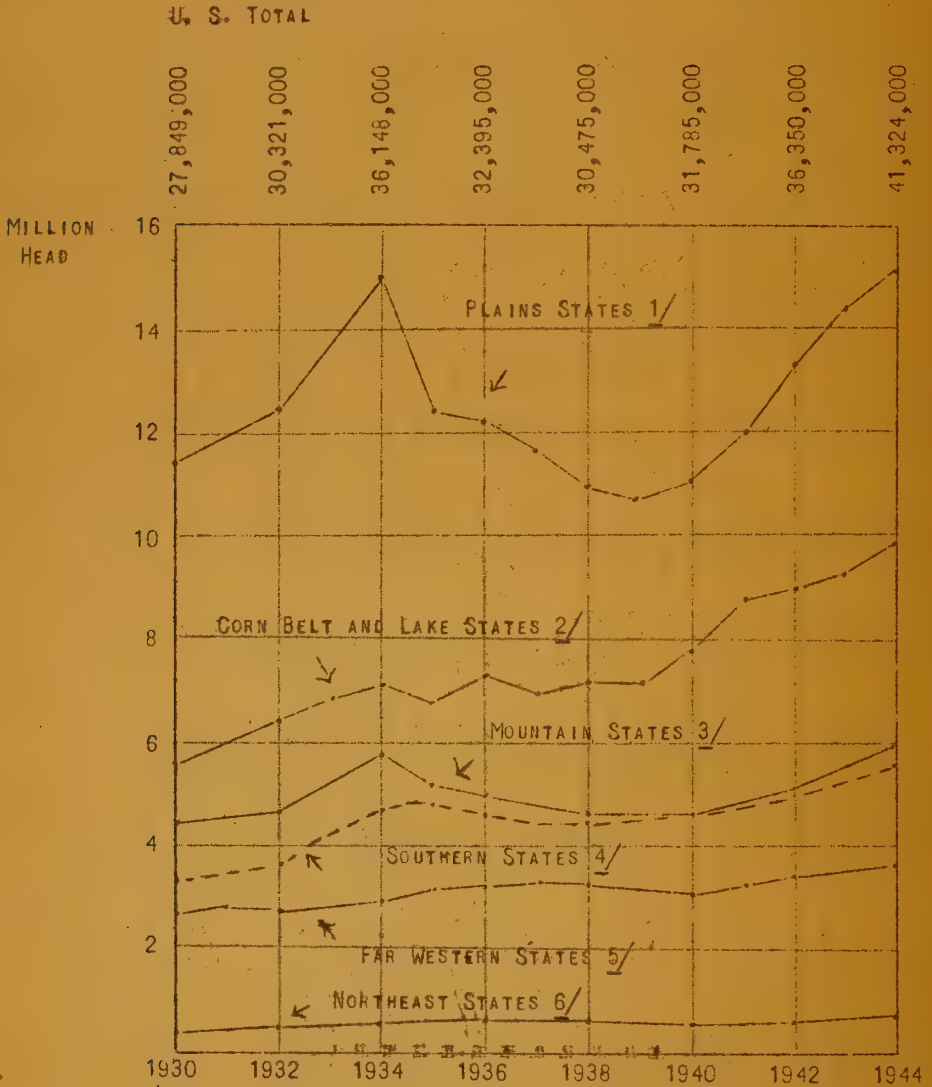
The number of cattle has increased since 1939 in all of the major agricultural regions (see figures 1 and 3). Thus an adjustment problem is found in varying degrees in every region.

As a great part of the cattle kept for beef, especially the breeding stock, are in the 17 Great Plains and western range states, (figure 1) much of the total reduction in the number of cattle kept for beef--probably about 60 percent--would be in those states. In most of those states especially the Great Plains and the Mountain states, where the cattle cycle is most pronounced, numbers now are near maximum carrying capacity under even the most favorable grazing conditions, and considerable reduction is needed to provide assurance of maximum beef output when less favorable grazing conditions recur.

In these range states, where beef-cattle production provides a way for utilizing the valuable forage resources found there, and where fluctuating weather and feed supplies, such as occur in these states, make production somewhat hazardous, it is essential that assurance of maximum beef output be obtained by rates of stocking consistent with the carrying capacity of the range and supplemental feed supplies that reasonably may be expected to be available. Otherwise producers there are confronted with the risk of being forced to dispose of their cattle when they are far below average in condition, and when demand for beef is likely to be unfavorable.

Of particular significance to producers of feeder cattle is the increase in beef cattle in the corn belt region and in counties of the plains states adjacent to the corn belt. In the corn belt, beef cattle increased 1 million head during 1943 while the number on feed declined $\frac{1}{2}$ million head during the year and will undoubtedly replace at least that number of western feeder cattle normally shipped into the area for finishing.

FIGURE 1. NUMBER OF BEEF CATTLE, BY REGIONS, JANUARY 1, 1930 - 1944



1/ N. DAK., S. DAK., NEBR., KAN., TEXAS

2/ OHIO, IND., ILL., MO., IA., MINN., WIS., MICH.

3/ MONT., IDAHO, WYO., COLO., UTAH, N. MEX.

4/ VA., W. VA., N. C., S. C., KY., TENN., GA., FLA., ALA., MISS., ARK., LA.

5/ WASH., ORE., CALIF., ARIZ., NEV.

6/ ME., N. H., VT., MASS., R. I., CONN., N. Y., N. J., MD., DEL.

Goals Reflect Needed Adjustments --

The state goals suggested by the State Committees last fall indicate that some reduction is needed in all the Great Plains and Western states. Generally, however, more reduction is suggested in South Dakota, Kansas, Oklahoma, Montana, Colorado, Wyoming, Oregon, Washington, and New Mexico than in other states of those regions.

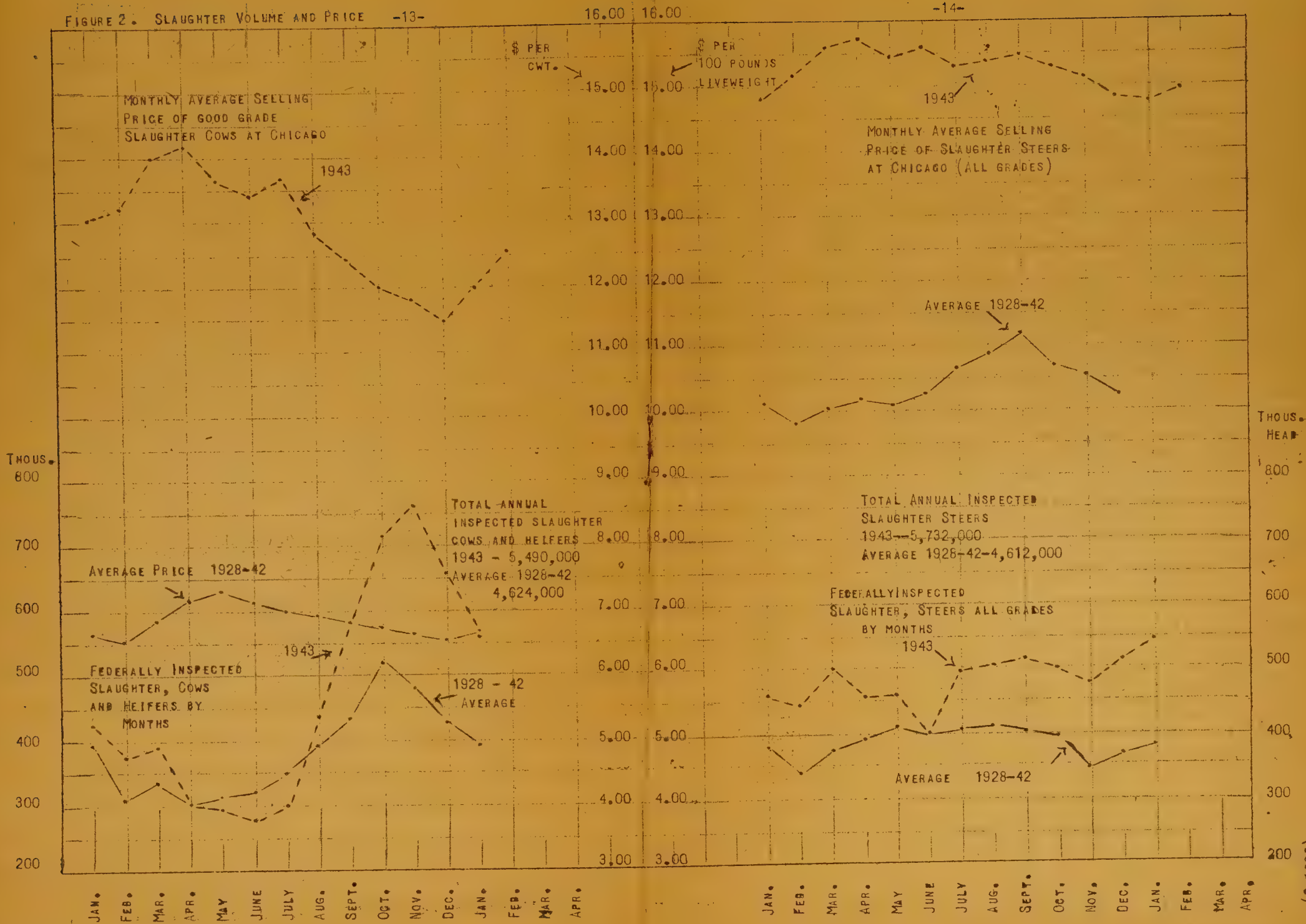
In the North Central states east of the Missouri River where about one-third of the cattle are produced, it will be necessary to adjust the number of cattle to smaller acreage of pasture. The number of beef cattle has increased rapidly in these states since 1939. On the other hand, the acreage of pasture was reduced about 1.4 million acres from 1942 to 1943, and if the goal acreage on feed grains and soybeans is attained in 1944 a further reduction in pasture of about 2.5 million acres will be necessary.

Adjustments both in acreage of pasture and numbers of cattle should be greatest in Iowa, Indiana and Illinois. The number of cattle in Michigan increased 28 percent from 1934 to 1944, and considerable reduction is suggested by the Michigan Committee.

In the Corn Belt, the wartime production problem as it affects beef cattle is to reduce the acreage used for pasture and hay in order to grow the maximum acreage of high-yielding crops and to obtain as large an output of beef with feeds which do not have a higher use value for other classes of livestock.

A reduction in the supply of hay for beef cattle can be offset in part by larger use of such feeds as corn stalk silage, and oats straw.

FIGURE 2. SLAUGHTER VOLUME AND PRICE -13-



Dixie Has 17 Percent --

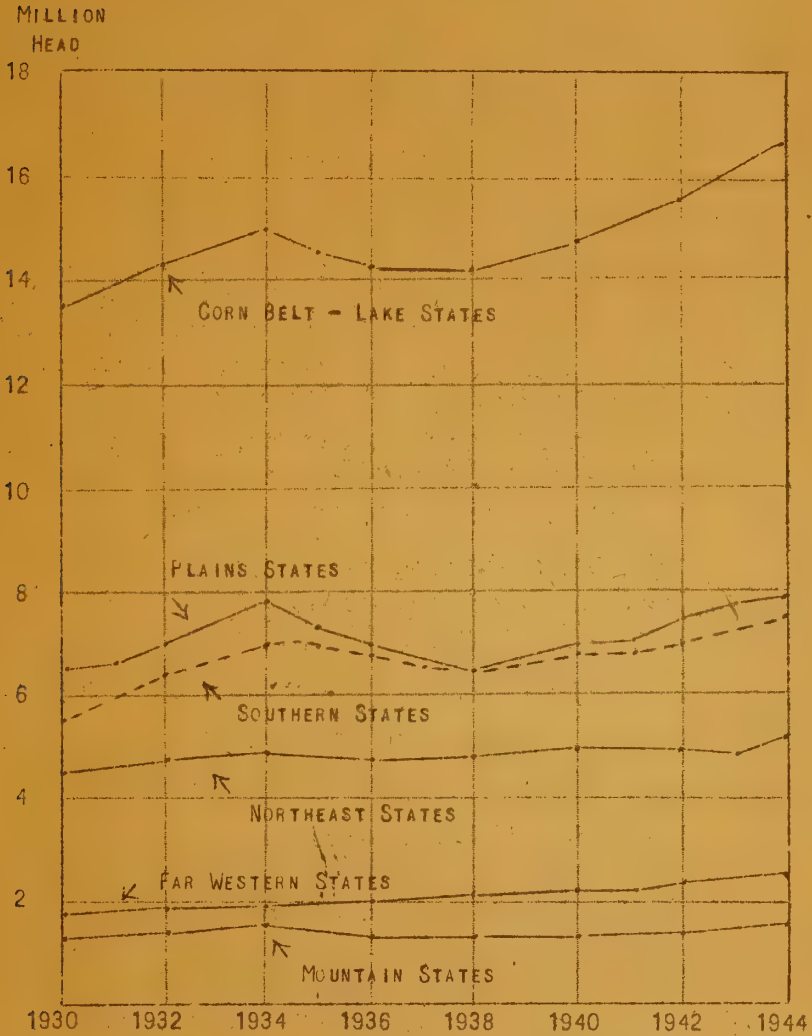
About 17 percent of all cattle and calves are in the Southern states, excluding Texas and Oklahoma. The number of cattle has increased steadily in the south during the last several years. It might be noted in passing that this has created a greater local demand for protein concentrates produced in Dixie, a situation which has contributed to the tightening of the supply of concentrates available for feeders in deficit areas, notably Colorado and other high altitude states. But a considerable part of the increased cattle population in many parts of the south has been based on an improving local forage feed situation, which has not been greatly affected by the war-time crop production program. Additional quantities of peanut hay have been available in the peanut areas. Total beef output probably could be increased, however, by some reduction in numbers and the use of better feeding and other management practices on the smaller herds.

In the Northeastern states, where dairy cattle predominate, there should be a relatively large disposal of cull dairy cows as the large number of dairy heifers retained in 1942 and 1943 become available for replacements.

A realistic view of the 1944 cattle situation is that nationally we have more cattle than can be maintained on our ranges, pastures, and crop acres that can be spared from the production of war essential crops. If normal marketing practices are followed we will likely have a serious shortage of meat during the summer months and producers will attempt to market more cattle during the autumn months than our market and slaughter facilities can handle under wartime handicaps. As a war measure a much larger percentage than usual must be slaughtered directly from the range or farm pastures.

FIGURE 3. NUMBERS OF MILK CATTLE, BY REGIONS, JANUARY 1, 1930 - 1944

(MILK CATTLE INCLUDES COWS KEPT FOR MILK AND HEIFERS
AND HEIFER CALVES KEPT FOR MILK COWS)



Slaughter Capacity

The largest monthly slaughter of cattle and calves in federally inspected plants for commercial distribution occurred in October 1942 when 1,247,000 cattle and 571,000 calves were slaughtered. In 1934 when the government cattle buying program was in operation, the combined total of government and commercial slaughter in these plants numbered 1,805,000 cattle and 884,000 calves in September, and 1,613,000 cattle and 990,000 calves in August. A slaughter goal of 35 million cattle and calves probably would include approximately 22.2 million cattle and 12.8 million calves, and the quota of the regular federally inspected plants (War duration plants excluded) would approximate 14.2 million cattle and 6.5 million calves. A yearly slaughter of 14.2 million cattle in these plants with the usual seasonal distribution would result in an October slaughter of 1,550,000 to 1,660,000 head. Although conditions are now somewhat different than in 1934 because of the war, and there is a scarcity of skilled packing house labor, it is probable that these plants could increase their operations to the level reached in that year, and handle their quota, provided adequate labor is available.

Slaughtering facilities tend to be concentrated at the larger livestock markets located in the Corn Belt and in the vicinity of the larger cities in the three Pacific Coast states. Fairly large plants are in operation at Fort Worth, Oklahoma City and Denver, but aside from these there are relatively few facilities for slaughtering cattle between the Missouri River and the West Coast. Facilities likewise are limited in the south. Increasing cattle slaughter, therefore, will necessitate greatly increased movement by rail and truck from producing sections to points where plants are available.

The monthly slaughter record of federally inspected cattle and calves for the entire United States is shown in the table on the following page.

(S-1096)

Monthly Slaughter of Federally Inspected Cattle 1/

	Cattle				Calves			
	:Actual:Goal for:1937-41:				:Actual:Goal for: 1937-41			
Monthly	: 1943	: 1944	: 1944 2/:	Ave.	: 1943	: 1944	: 1944 2/:	Ave.
	1,000 head		%		1,000 head		%	
January	: 855	1,007	1,193	8.4	: 322	441	500	7.7
February	: 781	914	994	7.0	: 311	413	462	7.1
March	: 843	919	1,108	7.8	: 386	526	572	8.8
April	: 723		1,079	7.6	: 340		592	9.1
May	: 695		1,150	8.1	: 299		598	9.2
June	: 626		1,150	8.1	: 293		559	8.6
July	: 756		1,179	8.3	: 304		526	8.1
August	: 882		1,235	8.7	: 398		526	8.1
September	: 1,022		1,292	9.1	: 496		533	8.2
October	: 1,148		1,363	9.6	: 620		592	9.1
November	: 1,158		1,250	8.8	: 594		540	8.3
December	: 1,074		1,207	8.5	: 499		500	7.7
Total	:10,563		14,200	100.0	:4,861		6,500	100.0

1/ Federally inspected slaughter runs from 60 to 64 percent of total.

2/ Based on inspected slaughter of 14.2 million head of cattle and 6.5 million head of calves, with 1937-41 average monthly distribution.

Transportation Facilities --

Thirty-five million head of cattle and calves probably can be transported to market this year if the seasonal distribution of marketing is more uniform than usual.

The heaviest rail movement is in October when cattle and lambs are marketed from western ranges in largest numbers to feedlots or for immediate slaughter. In 1943, the peak of railroad livestock loadings was 27,750 cars in the third week of October. The average weekly loadings for the 6-week period from October 1 to the middle of November was about 26,000 cars. It is doubtful if the railroads can handle much additional livestock at that time of the year, because stock cars probably would not be available and locomotives and labor would be needed for other transportation. The movement of livestock from western ranges uses a large number of stock cars because the distance transported is great and the turnover is slow.

The railroads are pooling their equipment to make it available where it is most needed. Railroads can handle an increased number of cattle, however, during the spring and summer when the number of stock cars loaded per week normally is about half as many as cars loaded per week in October.

The trucking situation is becoming serious. In the Corn Belt states, the heaviest burden on trucks is in the fall and winter when marketing of hogs is heaviest. Until that time trucks apparently will be available there even though cattle marketings increase considerably. In the range area, some livestock is moved to market by truck, but the trucks are used most extensively in delivering stock to the local railroad shipping point. If there is a shortage of livestock trucks in that area in the fall when cattle and lambs are marketed in largest numbers, driving cattle in to the local shipping point on foot will be more common.

Some Clinching Facts --

Appended are some timely hints on range management, the outgrowth of much experimentation by many alert and patient seekers after truth. The sources have been checked and double-checked, and these findings are passed along in the hope that the information may be of lasting benefit to cattle producers.

In 1943 yearling Herefords on short-grass pastures at the Central Plains Experimental Range made average gains per head under different rates of stocking as follows: heavy grazing, 251 pounds; moderate grazing, 283 pounds; light grazing, 317 pounds. Forage utilization for these three intensities of use was 50, 37, and 15 percent, respectively.

The greatest number of cattle or the greatest total pounds of beef do not produce the greatest profit. Considering expenses involved, investment and interest, various incidentals, and final market values, it was estimated that moderate stocking (approximately 40 head per section) produced a gross income of \$742 per section as compared with \$724 under heavy stocking (60 head per section).

Blue grama, buffalo grass and other important range grasses show a protein content of 6.0 to 10.5 percent in mid-summer. At the same time, common weeds such as scarlet globemallow and Russian thistle contain as much as 14.3 to 20.6 percent protein respectively. Fourwing saltbush contained 22.3 percent protein, based on dry weight, in May, 1943 and retained a high value fairly well throughout the season.

Monthly weight gains of individual cattle on the Central Plains Experimental Range declined from approximately 77 pounds in May to slightly over 30 pounds in September. In October, cattle grazed at the heavy rate lost an average of 4 pounds; moderately grazed cattle gained 4 pounds; and lightly grazed cattle gained 12 pounds.

Cattle on pastures consisting of blue grama and four-wing saltbush, a shrub with high protein content gained 328 pounds on bottomland pastures and 314 pounds on upland pastures from May 10 to November 10. Cattle on pastures consisting primarily of blue grama gained 294 pounds on bottomlands and 387 pounds on uplands.

Hereford steers grazed on three sets of pastures for the first half of the season and then moved to fresh forage for the last half of the summer gained 328, 296, and 296 pounds per animal. The gains of similar animals grazed season-long on corresponding check pastures were 305, 288, and 267 pounds. Rotation grazing, therefore, produced 7.5, 2.7 and 10.9 percent more pounds of total gain than continuous grazing on the same types of pastures. This study has not continued long enough to determine the effect of the rotation system on forage conditions.

For several years it has been observed that yearling Herefords gain approximately 200 pounds in the first three months and from 90 to 110 pounds in the last three months of the summer grazing season, May 10 to November 10.

Steers used in wintering trials at the U.S. Dry Land Field Station at Akron, Colorado, made gains of 149.4 pounds when fed cottonseed cake and cut cane fodder as compared with 38.6 pounds when fed cut cane fodder alone.

When transferred to grass pasture on the Central Plains Experimental Range the "uncaked" steers came within 57 pounds of catching up with the "caked" steers by the end of the grazing season.

Common winterfat, a valuable shrub, was unused even in heavily stocked pastures until mid-August. By mid-September every plant of this species had been heavily utilized. On the other hand, Russian thistles are grazed when young and not again until October and November.

Cattle on ponderosa pine-bunchgrass range near Woodland Park, Colorado, in 1943 gained 153 pounds per head under heavy grazing, 206 pounds under moderate grazing, and 236 pounds under light grazing. In terms of total gain per section of land this was the equivalent of 8,568, 8,858, and 5,664 pounds for the three rates of stocking in the order named.

On ponderosa pine ranges heavy grazing, 3 acres per cow month, resulted in utilization of 50 percent of current seasonal forage production; moderate grazing, 4 acres per cow month, utilized 37 percent of the forage; light grazing, 7 acres per cow month, used only 15 percent of the forage.

During August and September 1943 the crude protein content of blue grama on mountain ranges was 5.57 and 6.39 percent respectively as compared with 5.60 and 3.59 percent for this same species during the same months on short-grass ranges of the Great Plains.

Late season losses in cattle weight in 1943 on mountain ranges were 20 pounds per head on heavily grazed pastures and 15 pounds per head on moderately grazed pastures. Instead of a loss, lightly grazed pastures produced a gain of 3 pounds per head during the same period.

(See next page)

And in Conclusion --

So ends this fragment of a story that could go on and on. In fact, it will go on. It will continue on countless farms and ranches where millions of dumb critters subjected to the curse of man's dominion browse along the meandering trails that wind through the green pastures, beside the still waters, and on over the templed hills to manana-land--each animal uncorsciously playing its little part in the drama of life as we choose to fashion it from day to day while the seasons merge into the patchwork of the fleeting years.

It's an old, old story, this story of man's ins and outs and ups and downs because of his herds and flocks. Animal numbers brought Lot and Abram to the parting of the ways. Failure to go along on a cattle-reduction program ordained by God, cost Saul his crown and the kingdom of Israel its unity. Jesus was ordered out of the country of the Gadarenes by the whole populace because He permitted a herd of porkers to perish while He was mending the mind of the unfortunate Legion, who apparently had been born on the wrong side of the tracks. In these latter days of perfumed propaganda and undiluted crocodile tears, such an act would have been branded as the "slaughtering of innocent little pigs," and this would have increased the gravity of the accusation a hundred-fold, despite the fact that never a pig was raised that was not raised for slaughter, and despite the further fact that hogs were made for men, not men for hogs.

In the ordinary course of human events, whose ox is gored perhaps will always have some influence on the judgements of mankind. Unrepealed and unabridged, the law of self-preservation still heads earth's oldest code. But in times of great national stress, when America was calling, calling, many a good man has forgotten himself into immortality.

War is the rattler test. The defective brick emerges from the hopper in a puff of dust. The sound ones come out whole. These go into the defense walls, and into the proud sanctuary where the nations will assemble in peace and security when war is done.

All are architects of Fate,
Working in these walls of Time;
Some with massive deeds and great,
Some with ornaments of rhyme.

Nothing useless is, or low;
Each thing in its place is best;
And what seems but idle show
Strengthens and supports the rest.

These, too, are the times that try men's souls. But faith—the substance of things hoped for, the evidence of things not seen, simple childlike faith, still gleams as the patriot's brightest ornament when the Flag is under fire. Without willing fellowship in such emergencies, good leadership is vain.

Come times in war when such detailed explanations as have been offered in these pages dare not be given, even in a whisper. Then faith alone must light the way. Soldiers who demand a blueprint of the enemy's breastworks before advancing, already face defeat—defeat or a firing squad at dawn. On the home front, far removed from war's carnage and firing squads, the strongest compulsions are those that blossom in the human breast and urge good men to do the right. It is the miracle of America that in almost every crisis these promptings have been sufficient and to spare.

But there are hazards here which are not permitted to imperil the spirit of unity which is so essential at the fighting front where gallant men are offering up their all that Liberty may live. In the absence of stern military discipline and regimentation on the home front, the strongest safeguards are enlightenment and faith, these and the resolve to do what is right, come what may. This requires a rare type of courage---rare, but old as the eternal hills, and peculiarly American. And despite the distractions, it is winning the war.

Eyes blinded by the dust of things cannot see truth.

Ears stopped by the dust of things cannot hear truth.

Throats clogged by the dust of things cannot speak truth.

If the facts presented in this little pamphlet have helped to clear away the dust so that good men may see and hear and speak the truth about the most important and most dangerously circumstanced industry in the state, its mission has been fulfilled.

